CLAIMS:

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- 1. An electroluminescent device, which comprises a first set of bands and a second set of bands, which are arranged in such a way, that they form a two-dimensional mesh with points of intersection between the bands of the first set and the bands of the second set, the bands in each case consisting of a sequence of layers and at least one set of bands containing a light-emitting substance, which emits light when a voltage is applied between the first set of bands and the second set of bands.
- 2. An electroluminescent device as claimed in claim 1, characterized in that the bands in each case contain an organic layer (5,6,8,10) and at the points of intersection the organic layer (5,6) of the first set of bands is in contact with the organic layer (8,10) of the second set of bands.
- 3. An electroluminescent device as claimed in claim 2, characterized in that the organic layer (5,6,8,10) is a material selected from the group of organic polymers, organic copolymers, organic oligomers, metal complexes having at least one organic ligand, heterocycles and amines.
- 4. An electroluminescent device as claimed in claim 1, characterized in that a band of the first set of bands has a substrate (3), a first electrode (4) adjoining the substrate (3) and a first organic layer (5) adjoining the first electrode (4).
- 5. An electroluminescent device as claimed in claim 4, characterized in that a second organic layer (6) adjoins the first organic layer (5).
- 25 6. An electroluminescent device as claimed in either of claims 4 or 5, characterized in that the first organic layer (5) and the second organic layer (6) contain an electron-conducting material or a light-emitting substance.

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- 7. An electroluminescent device as claimed in claim 1, characterized in that a band of the second set of bands has a substrate (3), a second electrode (7) adjoining the substrate (3) and a third organic layer (8) adjoining the second electrode (7).
- 5 8. An electroluminescent device as claimed in claim 4, characterized in that a fourth organic layer (10) adjoins the third organic layer (8).
  - 9. An electroluminescent device as claimed in either of claims 7 or 8, characterized in that the third organic layer (8) and the fourth organic layer (10) contain a hole-conducting material or a light-emitting substance.
  - 10. An electroluminescent device as claimed in claim 7, characterized in that an additional layer (9) is situated between the substrate (3) and the second electrode (7).
- 15 11. An electroluminescent device as claimed in claim 10, characterized in that the additional layer (9) contains pigment or SiO<sub>2</sub>.